

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A multi-vane centrifugal fan, comprising:
a fan housing having an air suction port forming plate forming an air suction port and a step part, and a bell mouth with a recessed part of a prescribed depth provided around a circumference of the air suction port; and
an impeller rotatably housed in the fan housing and including:
a hub rotatably driven around a shaft core,
a plurality of vanes fixed to the hub and arranged with a prescribed spacing in a circumferential direction of the hub, and
an annular member for reinforcement provided on a side of the vanes opposite the hub, the annular member being accommodated by the step part,
the recessed part having air suction port side end parts positioned on the side of the vanes opposite the hub and rotatably inserted ~~therein~~ in the recessed part without having a shroud.
2. (Currently Amended) The multi-vane centrifugal fan as recited in claim 1, wherein
each of the vanes has a ~~length~~ longitudinal width in a shaft core direction ~~with a width~~ that decreases with a prescribed variation pattern from an air inlet side to an air outlet side.
3. (Previously Presented) The multi-vane centrifugal fan as recited in claim 2, wherein

the prescribed variation pattern includes a pattern that changes a shape of the air suction port side end part to a curved shape from the air inlet side to the air outlet side.

4. (Previously Presented) The multi-vane centrifugal fan as recited in claim 2, wherein

the prescribed variation pattern includes a pattern that changes a shape of the air suction port side end part to an arcuate shape having a prescribed curvature from the air inlet side to the air outlet side.

5. (Previously Presented) The multi-vane centrifugal fan as recited in claim 2, wherein

the prescribed variation pattern includes a linear variation pattern in which a shape of the air suction port side end part linearly changes from the air inlet side to the air outlet side.

6. (Previously Presented) The multi-vane centrifugal fan as recited in claim 2, wherein

the annular member is disposed at the air outlet side of the vanes proximate the numerous vanes proximate the air suction port.

7. (Currently Amended) A multi-vane centrifugal fan, comprising:
a fan housing having an air suction port and a bell mouth with a recessed part of a prescribed depth provided around a circumference of the air suction port, the fan housing forming a vortex chamber passageway and an air blow out port passageway; and
an impeller rotatably housed in the fan housing and including:

a hub rotatably driven around a shaft core,
a plurality of vanes fixed to the hub and arranged with a prescribed spacing in
a circumferential direction of the hub, the prescribed spacing being
fully open in a shaft core direction and in a direction of a side of the
vanes opposite the hub, and
an annular member for reinforcement disposed on an outer side in a radial
direction of the vanes and integrated with a plurality of end parts on
the side of the vanes opposite the hub, the annular member being
substantially aligned with a surface of the vortex chamber passageway
or the air blow out port passageway,
the recessed part having air suction port side end parts positioned on the side of the
vanes opposite the hub and inserted ~~therein~~ in the recessed part.

8. (Previously Presented) The multi-vane centrifugal fan as recited in
claim 3, wherein
the annular member is disposed at the air outlet side of the vanes proximate
the air suction port.

9. (Previously Presented) The multi-vane centrifugal fan as recited in
claim 4, wherein
the annular member is disposed at the air outlet side of the vanes proximate
the air suction port.

10. (Previously Presented) The multi-vane centrifugal fan as recited in claim 5, wherein

the annular member is disposed at the air outlet side of the vanes proximate the air suction port.